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ABSTRACT

"Communication apprehension" is a broad-based fear or anxiety associated with either real or anticipated communication with another person or persons. The purpose of this paper, the fifth in a series of five dealing with communication reticence is to speculate on the causes, correlates, and effects of communication apprehension. The effects of communication apprehension in the classroom are especially relevant to those involved in speech instruction. The impact of this problem on standardized achievement tests, grade point average, achievement in small classes, personalized instruction and lecture classes is discussed. Possible causes for communication apprehension, such as intelligence, teacher expectation, student attitudes, and student withdrawal, are also analyzed. (KS)

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THE PROBLEM OF COMMUNICATION APPREHENSION IN THE CLASSROOM

by James C. McCroskey*

One of the persistent concerns of both teachers and researchers in the field of communication over the past half-century in the United States has been the phenomenon referred to as "stage fright." Stage fright, sometimes referred to as "speech fright" or "speech anxiety," is the fear or anxiety that people experience when anticipating or engaging in public speaking. A recent bibliography notes almost 250 articles, theses, and papers that have appeared in the literature related to this problem. There is scarcely a teacher of public speaking alive who has not recognized the seriousness of the problem and attempted some remedy in their classroom.

With all of this effort and concern directed toward the problem of stage fright, one might expect that the problem has been overcome, or at least greatly reduced. Unfortunately, this is not the case. A recent nationwide survey indicated that fear of speaking in public is still the number one fear experienced by Americans.[1]

In recent years communication scientists and teachers have become increasingly aware that the efforts they have directed toward solving the stage fright problem have been misdirected. This misdirection has resulted from two things: (1) stage fright has been considered abnormal and a problem faced by a relatively small proportion of the population, when, in fact, it is a normal response to a threatening situation experienced by a large majority of the population, and (2) a much more severe problem faced by a smaller percentage of the population was overlooked because its

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manifestations were seldom observed except in public speaking settings. This problem has been referred to as "communication apprehension."[2]

The Nature of Communication Apprehension

"Communication apprehension" is a broad-based fear or anxiety associated with either real or anticipated communication with another person or persons. While the normal person anticipates a pleasant and rewarding experience as a result of communicating with others, and usually has such experiences, the person who is highly communication apprehensive expects punishment (or at least, lack of reward) from her or his communication with others, and frequently has such negative experiences. Such people do not enjoy talking with others, either singly or in groups, and will go to great lengths to avoid communication. If circumstances force them to become involved in communication with others, they normally will feel uncomfortable, tense, and embarrassed, and will appear (at best) shy or reticent to others.

It is important that we make a clear distinction between "stage fright" and "communication apprehension," for these are very different phenomena. Stage fright is a response to either the participation in or the anticipation of a public performance, such as a public speech, an oral reading, singing before a group, or even performing in an athletic competition before an audience. It is experienced at least to some degree by nearly everyone. In fact, the person who does not ever experience stage fright should probably be considered abnormal, and some concern for their mental health would not be inappropriate. Communication apprehension, on the other hand, is a response to any real or anticipated communication, either public or private, with any number of other people. While more

apprehension may be experienced in large group settings than in private settings, the crucial distinction is that the person who is highly communication apprehensive will have such negative responses across this broad continuum, while the typical person who experiences stage fright will not have a similar response to less public communication encounters. While the person who is highly communication apprehensive is likely to experience extreme stage fright in public settings, the person who regularly experiences stage fright in public settings more than likely will experience no similar emotional disturbance relating to private communication or small group communication encounters.

As we noted previously, stage fright is experienced by the overwhelming majority of people. Communication apprehension, however, is experienced by far fewer people. Most estimates suggest that 10-20 percent of the American population suffer from extreme communication apprehension and up to 20 percent more experience moderately high communication apprehension. At this time there are no data to indicate whether the American norm is higher or lower than that for other countries or cultures. Research on communication apprehension outside the U.S. has yet to be conducted.

Causes of Communication Apprehension

While all of the causes of communication apprehension are not fully known, it is clear that communication apprehension is not an hereditary trait. Parents with high communication apprehension do not necessarily produce children with high communication apprehension. Rather, it appears that communication apprehension is learned by the individual, usually during the early childhood years. If the child is reinforced for communicating early in life, it is very unlikely that he or she will develop a high

level of communication apprehension. With positive reinforcement for communicating, which most children receive, the child learns to value communication both as a tool and as an intrinsically desirable experience.

The child who is not reinforced for communicating, or is punished, fails to develop the normal positive orientation to communication. He or she does not find intrinsic reward in communication itself, nor does he or she learn the instrumental functions of communication. For such a child, communication really does not serve as a tool. Rather, communicating results in negative experiences. Such a child is very likely to develop a high level of communication apprehension.

While the nature of reinforcement during early childhood is the principle causative factor which leads to or prevents the development of communication apprehension, it is not the only potential cause. Traumatic experiences can alter the normal pattern of a child and lead to the development of a high level of communication apprehension. The loss of a parent or a brother or sister, particularly through a sudden violent encounter, can severely disturb a child. One of the results of such a disturbance can be the development of high communication apprehension.

While high communication apprehension usually develops in preschool years or does not develop at all, there are some instances where it develops later, or develops early but is eliminated during the early years in school. Each of these effects can be attributed to the impact of the school environment--teachers and peers. For the child who has experienced negative reinforcement in the pre-school years and enters school as a high communication apprehensive, extensive positive reinforcement from teachers and later from peers, can help overcome the problem. But, of course, such positive reinforcement is not always provided. Similarly, a child may

enter school as a moderate communication apprehensive and negative reinforcement from teachers and peers may cause the level of communication apprehension to increase. Neither of these effects will occur quickly, and the change in the child may be hardly noticeable, even to a trained observer. Patterns which have developed over several years prior to entering school are seldom reversed in a single year.

Correlates of Communication Apprehension

Communication apprehension has been found to be correlated with a variety of socially undesirable personality characteristics. In a series of studies it was found that self-esteem and communication apprehension were negatively correlated for samples of college students ($r=-.61$), for elementary and secondary school teachers ($r=-.56$), and for a group of federal employees ($r=-.72$).[3] High communication apprehension was associated with negative self-image in every sample. In another study, the relationship between communication apprehension and 16 dimensions of personality were examined. Communication apprehension was found to be positively correlated with general anxiety and negatively correlated with cyclothymia, emotional maturity, dominance, surgency, character, adventurousness, confidence, self-control, and trustfulness. The multiple correlation between the 16 personality measures and communication apprehension was .72, which suggests a strong relationship between communication apprehension and general personality.[4] Unfortunately, the overall relationship shows communication apprehension to be associated with the socially maladaptive end of the continuum on all the personality variables with which a significant relationship was observed.

One encouraging result came from the study cited above, however.

There was no significant relationship found between communication apprehension and intelligence.[5] Thus, although high communication apprehensives have a negative image of themselves, they are not intellectually different from persons with lower communication apprehension.

Effects of Communication Apprehension

Research on the effects of communication apprehension suggests that it has a pervasive influence on a person's life. Studies have indicated that, compared to people lower in communication apprehension, high communication apprehensives choose housing that is more remote from centers on interaction,[6] choose seats in a small group where they are less likely to be forced to interact,[7] choose occupations that have lower communication requirements, even though they offer less status and income,[8] are less satisfied in their employment,[9] are less likely to be offered employment,[10] have less desire for advancement, and lower expectations of advancement,[11] are perceived as less attractive by their peers,[12] are perceived as less credible by their peers,[13] engage in less self-disclosure,[14] participate less in small group interaction,[15] are less likely to be perceived as leaders in a small group,[16] to exhibit more tension in small group interaction,[17] to make comments in small groups that are less relevant to the dicussion,[18] are less likely to be perceived as opinion leaders,[19] and to have fewer dates with members of the opposite sex but to be more likely to date one person to the exclusion of others.[20]

The behaviors of the person with high communication apprehension, then, are rather sharply deviant from those of people with low communication apprehension. Not only are specific communication behaviors different, but behaviors which are related to possible exposure to communication, such as

housing and occupational choices, are also. In addition, other people tend to perceive the person with high communication apprehension in negative ways. This clear negative pattern has led to several studies investigating the impact of communication apprehension in the learning environment.

Effects of Communication Apprehension in the Classroom

Interaction between students and teachers is an intrinsic part of the learning environment for most instruction in elementary and secondary schools, as well as colleges, in the United States. Some subject matter areas, of course, result in more interaction demands than others. Speech classes are an extreme example of the latter group, particularly public speaking classes.

The impact of communication apprehension on public speaking instruction is severe. As we might expect, highly communication apprehensive students try to avoid taking such classes. When such courses are not required, few high communication apprehensives will enroll. Those who do are very likely to drop the class before the first required performance.[21] When the course is required, the dropout pattern still exists.[22] But for the highly communication apprehensive students who remain, very severe problems frequently occur. In this writer's personal experience and direct observations, the manifestations of high communication apprehension have ranged from simple absence on the day of an assigned speech or a refusal to speak because of not being "ready" to fainting, regurgitation of the student's last meal, running from the room, and attempted suicide.

Most instruction, however, does not require as extensive or as public communication behavior as is required in public speaking classes.

Thus, it is important that we examine the impact of communication apprehension in more "normal" instruction.

Standardized Achievement Tests. One of the least biased methods of determining a student's level of learning is by use of standardized achievement tests. Such tests are routinely administered during the final two years of secondary school in the United States. Two studies have been reported that indicate that a person's level of communication apprehension has a major impact on general achievement. McCroskey and Anderson found that highly communication apprehensive students scored significantly lower than less apprehensive students on the American College Test (ACT), both on the overall or composite score and on the four individual subscores for social science, natural science, mathematics, and English.[23] Similar effects were observed by Bashore on the ACT, as well as the Illinois State High School Test, the verbal portion of the College Entrance Examination Board Test, and the Preliminary Scholastic Aptitude Test.[24] Taken together, these studies clearly indicate that high communication apprehensives learn less than low communication apprehensives throughout their elementary and secondary education.

Grade Point Average. A study of 1454 college students examined the impact of communication apprehension on grades awarded by teachers. The students studied had completed from one to four years of college at the same time the data were collected. The results indicated a sharp distinction between students who were high communication apprehensives and those that were low communication apprehensives. The low communication apprehensives had GPA's across all courses taken that were approximately one-half grade point higher than the high communication apprehensive students on a four-point sclae (0.0 to 4.0).[25]

Achievement in Small Classes. From the studies noted above it is evident the high communication apprehension is associated with lower overall student achievement. Other research has investigated the effect of communication apprehension in particular types of instruction. Two studies have examined the impact of communication apprehension in small classes with enrollments of from 20 to 30 students. High communication apprehensives were found to receive lower scores on both objective tests and instructor-evaluated written projects than low communication apprehensives in small college classes.[26] A similar result was observed on grades in small classes at the junior high school level.[27]

Personalized Instruction. In recent years there has been increased emphasis on personalizing and individualizing instruction. A variety of instructional methods, sometimes referred to as "Personalized Systems of Instruction," or "PSI," have been implemented at all levels of education. Crucial characteristics of most of these systems include criteria-referenced testing and grading, multi-media dissemination of information (often through a learning center), and individual contact with an instructor or tutor. While the primary learning of information in such systems is normally dependent on the mediated materials, students with problems have access to the instructor or tutor for individual help. While the advantages of such instructional systems have been strongly promoted in educational circles, it is clear that one-to-one communication with the instructor or tutor is vital for students with problems in mastering the information in the course. It might be expected, therefore, that communication apprehension could have an impact on those students.

A study reported by Scott, Yates, and Wheeless confirmed that expectation.[28] The study found that high communication apprehensives, as

compared to lows, not only were taking the tests on the modules more times (repeated testing to demonstrate mastery was permitted in the course) but also they were completing fewer modules. Thus, it was concluded, the PSI system was not proving effective for students with high communication apprehension.

Lecture Classes. While small classes and PSI systems not only allow student-teacher interaction but also require it in many cases, the typical mass lecture class does neither. Thus, while communication apprehension has been found to impact learning in other instructional systems, there is little reason to expect such an impact in a mass lecture course. Thus, it is not surprising that in a study of 709 students in a mass lecture course, no relationship between communication apprehension and achievement whatsoever was observed.[29]

Causes of Classroom Effects

It is clear from the research noted above that communication apprehension has a very negative impact on learning in most instructional environment. It is important, therefore, to examine the possible causes of the effects observed.

Intelligence. Since it is well established that intelligence and achievement are strongly associated, intelligence must be considered to be a potential cause for any achievement differences observed. In this case, however, intelligence must be rejected as a causal agent for two reasons. First, intelligence and communication apprehension have not been found to be correlated.[30] Second, even if there were a correlation between the two, since high communication apprehensives were found to achieve less than low communication apprehensives in some instructional environments but not in

others, that correlation could not account for the differential results.

Teacher Expectation. Since the publication of Pygmalion in the Classroom,[31] considerable attention has been directed toward the correlation between the expectation a teacher has for a student and that student's actual achievement. The correlation appears to be substantial. In a number of studies it has been observed that the teachers' expectations predict differential achievement between students even when there is no difference in the students actual abilities.[32] Thus, at least in some situations, teachers' expectations become self-fulfilling prophecies. The relevant question here, therefore, is whether teachers form differential expectations for high and low communication apprehensive students.

Research on the expectations teachers have of high and low communication apprehensive elementary school students shows a major difference in expectations.[33] This research indicated that teachers expect low communication apprehensive students, as opposed to highs, to do better in all academic subjects, to have a much more promising future in education, and to have much better relationships with their peers.

Although other research already noted indicates that the teachers' expectations are more than likely correct, the causal relationship is elusive. While the expectations of the teachers may be a major contributor to the eventual effects, it may be that the expectations are the product of the teachers having seen the effects occur in the past and would occur inevitably whether the teachers expected them to or not. Very probably, however, we have an instance of reciprocal causality, not unlike that of the chicken and the egg.

Student Attitudes. Since communication apprehension has such a major impact on people's behavior, it is reasonable to expect that it would also

have an impact on many attitudes. As almost any teacher can testify, students' attitudes toward school in general and those toward specific classes can have an impact on their achievement. It is important, therefore, to consider whether communication apprehension has an impact on students' school-related attitudes. Three studies have been reported in this area.

In a study of junior high school students, Hurt, Preiss, and Davis found a substantial correlation between communication apprehension and attitude toward school in general.[34] As level of communication apprehension increased, the attitude toward school became more negative. A study of college students found the same pattern.[35] In a study of student attitudes toward specific types of classes, McCroskey and Andersen found that low and moderate communication apprehensives preferred small classes to mass lecture classes, but the exact opposite pattern was observed for high communication apprehensives.[36]

The relationship between attitudes and achievement is clear in these studies. High communication apprehensives achieve less and like school less than low communication apprehensives. Both high and low communication apprehensives indicate a preference for the type of class that they do best in. But, once again, the causal agent is elusive. Does communication apprehension cause negative attitudes which result in lower achievement? Does communication apprehension cause lower achievement which results in negative attitudes? It is clear that communication apprehension is associated with both negative attitudes and lower achievement, but the research noted above does not explain why.

Student Withdrawal. With the exception of the mass lecture class, most instructional methods require the student to communicate, with

the teachers and/or peers, in order to learn. Research noted previously in this paper clearly indicates that people who suffer from high communication apprehension consistently withdraw from communication in settings outside the classroom. If a similar pattern can be found within the instructional setting, this would provide the best causal explanation for the relationship between communication apprehension and student achievement.

Two studies have been reported that indicate such is the case. In the Scott, Yates, and Wheeless study of communication apprehension in a PSI course noted above, a record was kept of how many times each student went to a tutor for help in the course. Tutors were available all day and evening during the semester and students were encouraged but not required to seek assistance. Analyses of those data indicated that although high communication apprehensives were having much more difficulty mastering the modules in the course, low communication apprehensives sought help from the tutors almost three times more often than highs.[37]

Research reported on interaction in typical small classrooms has indicated that there are certain seats from which most of the student participation emanates, generally in the center of the room towards the front. Teachers call on students in these seats more and students in these seats volunteer more comments and questions than do other students.[38] Thus, students in these seats are more likely to determine their deficiencies and correct them, as well as to request needed information, than are students sitting in other parts of the room.

Recent research indicates that while low communication apprehensives are twice as likely to sit in this high interaction area (20 percent of the total seats) as they are to sit anywhere else (80 percent of the total seats),

high communication apprehensives are four times as likely to sit outside this interaction area as they are to sit in it.[39]

These studies suggest, therefore, that the causal link between communication apprehension and achievement is the communication withdrawal behavior of high communication apprehensives in comparison with the communication seeking behavior of the low communication apprehensives. Students must communicate to learn. Those who communicate less, learn less.

Implications for the Classroom Teacher

The implications of the research on communication apprehension are of considerable importance to all classroom instructors, and even more central to teachers of speech. No instructor, with the possible exception of the teacher of a voluntary class in public speaking, is likely to ever face a class that contains no highly communication apprehensive students. The traditional interaction-oriented instructional system presents a severe handicap to these students. An obvious answer to the problem is to teach all classes as mass lecture classes, but that solution is unsatisfactory because it would penalize all those students who are not high communication apprehensives. Some other approach is needed.

Little can be done to help the communication apprehensive student in the regular classroom. Requiring the student to participate will only aggravate the student's problem. Requiring the student to give formal presentations could have disastrous results. But the classroom teacher can avoid hurting the communication apprehensive student. The teacher can eliminate grading on "participation," he or she can provide options for assignments other than formal presentations, he or she can permit

voluntary seating choices so that the communication apprehensive student can be comfortable in the classroom, he or she can avoid calling on communication apprehensive students and forcing involuntary participation, and, most importantly, the teacher can attempt to structure the course so that students can obtain all necessary information without having to seek extra communication contact with either the teacher or peers.

While all of the suggestions noted above are relatively simple to implement and should be helpful, the real solution to the problems of communication apprehension is treatment. Several methods of treating communication apprehension have been developed and can be implemented in any school system.[40] The concerned teacher should push for implementation of such programs.

Although it may be obvious from the research cited above, one major problem with the research in communication apprehension to date is that it has been bound to a single culture. Although subjects of vastly differing age levels and varying occupations have been studied, all have been North Americans and most have been Caucasians. To date no significant data are available relating to cultures other than the predominate North American culture.[41] Whether the relationships discussed in this paper would be the same or different in other countries or other cultures remains an unresearched question.

FOOTNOTES

1. "What Are Americans Afraid Of?" The Bruskin Report, No. 53, 1973.

2. J. C. McCroskey, "Measures of Communication-Bound Anxiety," Speech Monographs, XXXVII (November, 1970), 269-277 and "Validity of the PRCA as an Index of Oral Communication Apprehension" (paper presented at the Speech Communication Association Convention, 1975, Houston, Texas).

3. J. C. McCroskey and V. P. Richmond, "Self-Credibility as an Index of Self-Esteem" (paper presented at the Speech Communication Association Convention, 1975, Houston, Texas).

4. J. C. McCroskey, J. A. Daly, and G. A. Sorensen, "Personality Correlates of Communication Apprehension," Human Communication Research, in press. See also, P. K. Knutson and W. B. Lashbrook, "Communication Apprehension as an Antecedent to Social Style," unpublished paper, West Virginia University, 1976.

5. McCroskey, Daly and Sorensen.

6. J. C. McCroskey, "The Effects of Communication Apprehension on Nonverbal Behavior," Communication Quarterly, in press.

7. A. N. Weiner, "Machiavellianism as a Predictor of Group Interaction and Cohesion" (unpublished Master's thesis, West Virginia University, 1973).

8. J. A. Daly and J. C. McCroskey, "Occupational Desirability and Choice as a Function of Communication Apprehension," Journal of Counseling Psychology, XXII (July, 1975), 309-313.

9. R. L. Falcione, J. C. McCroskey, and J. A. Daly, "Job Satisfaction as a Function of Communication Apprehension," unpublished paper, West Virginia University, 1975; see also J. A. Daly, R. L. Falcione, and J. C. McCroskey, "Communication Apprehension, Supervisor Communication Receptivity, and Satisfaction with Supervision" (paper presented at the Eastern Communication Association Convention, 1976, Philadelphia, Pennsylvania).

10. J. A. Daly and S. A. Leth, "Communication Apprehension and the Personnel Selection Decision" (paper presented at the International Communication Association Convention, 1976, Portland, Oregon) and V. P. Richmond, "The Effect of Communication Apprehension on Employers' Perceptions of Job Applicants," unpublished paper, University of Nebraska, 1976.

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12. J. C. McCroskey, J. A. Daly, V. P. Richmond, and B. Cox, "The

Effects of Communication Apprehension on Interpersonal Attraction," Human Communication Research, in press; and J. C. Quiggins, "The Effects of High and Low Communication Apprehension on Small Group Member Credibility, Interpersonal Attraction and Interaction" (paper presented at the Speech Communication Association Convention, 1972, Chicago, Illinois).

13. J. C. McCroskey and V. P. Richmond, "The Effects of Communication Apprehension on the Perception of Peers," Western Speech Communication, in press. See also, Quiggins.

14. P. R. Hamilton, "The Effect of Risk Proneness on Small Group Interaction, Communication Apprehension, and Self-Disclosure" (unpublished Master's thesis, Illinois State University, 1972) and J. C. McCroskey and V. P. Richmond, "Communication Apprehension as a Predictor of Self-Disclosure," unpublished paper, West Virginia University, 1975.

15. G. A. Sorensen and J. C. McCroskey, "The Prediction of Interaction Behavior in Small Groups" (paper presented at the Speech Communication Association Convention, 1973, New York, New York); J. A. Wells and W. B. Lashbrook, "A Study of the Effects of Systematic Desensitization of the Communicative Anxiety of Individuals in Small Groups" (paper presented at the Speech Communication Association Convention, 1970, New Orleans, Louisiana); Hamilton; Weiner.

16. V. J. Wenzlaff, "The Prediction of Leadership: A consideration of Selected Communication Variables" (unpublished Master's thesis, Illinois State University, 1971).

17. Sorensen and McCroskey.

18. Wells and Lashbrook; Weiner.

19. H. T. Hurt and K. Joseph, "The Impact of Communication Apprehension in the Process of Social Change" (paper presented at the Eastern Communication Convention, 1975, New York, New York); McCroskey and Richmond, "The Effects of Communication Apprehension on the Perception of Peers."

20. J. C. McCroskey and M. E. Sheahan, "Communication Apprehension, Social Preferences, and Social Behavior," unpublished paper, West Virginia University, 1976.

21. McCroskey, "Validity of the PRCA as an Index of Oral Communication Apprehension."

22. McCroskey, "Validity of the PRCA as an Index of Oral Communication Apprehension."

23. J. C. McCroskey and J. F. Andersen, "The Relationship Between Communication Apprehension and Academic Achievement Among College Students," Human Communication Research, in press.

24. D. N. Bashore, "Relationships Among Speech Anxiety, IQ, and High

School Achievement" (unpublished Master's thesis, Illinois State University, 1971).

25. McCroskey and Andersen.

26. M. D. Scott and L. R. Wheeless, "An Exploratory Investigation of Three Types of Communication Apprehension on Student Achievement," unpublished paper, West Virginia University, 1976.

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28. M. D. Scott, M. P. Yates, and L. R. Wheeles, "An Exploratory Investigation of the Effects of Communication Apprehension in Alternative Systems of Instruction" (paper presented at the International Communication Association Convention, 1975, Chicago, Illinois).

29. McCroskey and Andersen.

30. McCroskey, Daly, and Sorenson.

31. R. Rosenthal and L. Jacobson, Pygmalion in the Classroom: Teacher Expectation and Pupils' Intellectual Development (New York: Holt, Rinehart, and Winston, 1968).

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33. J. C. McCroskey and J. A. Daly, "Teachers' Expectations of the Communication Apprehensive Child in the Elementary School," unpublished paper, West Virginia University, 1975.

34. Hurt, Preiss, and Davis.

35. McCroskey and Sheahan, "Communication Apprehension, Social Preference, and Social Behavior."

36. McCroskey and Andersen.

37. Scott, Yates, and Wheeles.

38. R. Sommer, Personal Space (Englewood Cliffs, New Jersey: Prentice-Hall, 1969).

39. J. C. McCroskey and M. E. Sheahan, "Seating Position and Participation: An Alternative Theoretical Explanation" (paper presented at the International Communication Association Convention, 1976, Portland, Oregon).

40. See, for example, J. C. McCroskey, D. Ralph, and J. E. Barrick, "The Effects of Systematic Desensitization on Speech Anxiety," Speech Teacher, XIX (January, 1970), 32-36; J. C. McCroskey, "The Implementation of a Large

Scale Program of Systematic Desensitization for Communication Apprehension," Speech Teacher, XXI (November, 1972), 255-264; and W. J. Fremouw and M. G. Harmatz, "A Helper Model for Behavioral Treatment of Speech Anxiety," Journal of Consulting and Clinical Psychology, XLIII (October, 1975),652-660.

41. The author would be most interested in collaborating with scholars in other cultures to pursue this line of research.